

Four new species for the Belgian fauna (Lepidoptera: Gracillariidae, Coleophoridae and Tortricidae)

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Samenvatting. Vier nieuwe soorten voor de Belgische fauna (Lepidoptera: Gracillariidae, Coleophoridae, Gelechiidae and Tortricidae)

Onlangs werden drie nieuwe soorten vastgesteld voor de Belgische fauna: *Caloptilia semifascia* (Haworth, 1828) (Gracillariidae), *Coleophora calycotomella* Stainton, 1869, *C. adpersella* Benander, 1939 (Coleophoridae) en *Cydia inquinatana* (Hübner, [1799]). De exemplaren werden alle in het oosten van België verzameld, in de provincies Limburg en Luik.

Résumé. Quatre espèces nouvelles pour la faune belge (Lepidoptera: Gracillariidae, Coleophoridae et Tortricidae)

Récemment quatre espèces nouvelles furent trouvées pour la faune belge: *Caloptilia semifascia* (Haworth, 1828) (Gracillariidae), *Coleophora calycotomella* Stainton, 1869, *C. adpersella* Benander, 1939 (Coleophoridae) et *Cydia inquinatana* (Hübner, [1799]). Tous les exemplaires furent capturés dans la partie orientale du pays, dans les provinces du Limbourg et Liège.

Key words: *Caloptilia semifascia* – *Coleophora adpersella* – *Coleophora calycotomella* – *Cydia inquinatana* – Belgium – faunistics – first record

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Caloptilia semifascia (Haworth, 1828)

There are two specimens of this species in the Belgian collection of the Royal Belgian Institute of natural Sciences without a locality label. De Crombrugghe bought these specimens and it is impossible to know whether they are from Belgian origin. Therefore, the species was not included in the Belgian list (De Prins 1998: 42). However, after examination of a specimen caught by the second author at Diepenbeek (province of Limburg) on 04 September 2002, it became clear that the species does occur in Belgium. It should be inserted between *C. falconipennella* (Hübner, [1813]) and *C. onustella* (Hübner, [1813]) (De Prins 1998: 39).

C. semifascia is widespread in Europe, especially in North and Central Europe. It has not been found outside Europe. However, it is very local, tending to occur in isolated but sometimes populous colonies at the margins of woods and hedgerows with many *Acer* trees (Emmet *et al.* 1985: 267). Buszko (1996: 49) lists it from the following countries: Austria, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Norway, Poland, Russia, Slovakia, Sweden, Switzerland, and former Yugoslavia. In Great Britain it occurs in Wales and England (Emmet *et al.* 1985: 267). It is absent from the Netherlands and from Luxemburg. In Germany it has been recorded during the last 20 years from Nordrhein-Westfalen, and some pre-1980 records are known from Baden-Württemberg, Bayern, Sachsen and Thüringen (Gaedike & Heinicke 1999: 51). In France, it has been rarely observed. Lhomme (1946–

1963: 1065) lists 13 departments: Côte-d'or, Doubs, Gironde, Indre, Isère, Jura, Lot, Maine-et-Loire, Oise, Hautes-Pyrénées, Haut-Rhin, Savoie, and Vendée.

The main foodplant of the caterpillar is *Acer campestre*. In some circumstances, when there are many *A. campestre* trees in the neighbourhood that are heavily infested, it also occurs on *Acer pseudoplatanus*. The young larva makes a mine on the underside of the leaf, and later on it lives in a cone or a roll. Pupation takes place in July to August in a shining, yellowish white cocoon spun on either side of a leaf, generally near the margin. The imago is univoltine, it emerges from late July to September and is active till October. It hibernates as an adult and reappears until May (Emmet *et al.* 1985: 267).

***Coleophora adpersella* Benander, 1939**

A female specimen of *Coleophora adpersella* was caught at Visé (province of Liège) on 07.VIII.2000, leg. R. Spronck (det. H. W. van der Wolf). This is the first record of this species for Belgium. It should be added in the Belgian list after *Coleophora sternipennella* (Zetterstedt, [1839]) (De Prins 1998: 67).

C. adpersella is widely distributed in Europe. Baldizzone (1996: 94) mentions it from Austria, Bulgaria, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Poland, Romania, Russia, Sardinia, Slovakia, Sweden, and former Yugoslavia.

C. adpersella was mentioned for the Netherlands as recent as 1985 (Kuchlein 1985) though two specimens were caught already in 1937 at Amsterdam, leg. A. Diakonoff. Since then, 9 more localities became known, scattered over 6 provinces (Kuchlein 1993: 215). The species was added to the British list in 1958 (Markworth-Praed 1958). Before it was included in *C. laripennella* sensu Meyrick, [1928] which embraced all coleophorids feeding inland on Chenopodiaceae (Emmet *et al.* 1996: 308). It occurs now in the southern parts of England. It has not yet been recorded from Luxemburg. In Germany, the species has recently been observed in Schleswig-Holstein, Rheinland-Pfalz, Saarland, Brandenburg, Sachsen, Sachsen-Anhalt, and furthermore an old record from Thüringen is known (Gaedike & Heinicke 1999: 73).

The egg of *C. adpersella* is laid in a floret of *Atriplex littoralis*, the main foodplant of the species. The young larva lives in a mine, but later on it constructs the typical coleophorid case, which is, when full-grown, cylindrical, made of pale buff silk, and only sparsely mixed with darker granular material. The species has also been mentioned to live on *Halimione portulacoides* (Emmet *et al.* 1996: 308), and less often on *Suaeda maritima* (Uffen [1979]: 93 and on *Chenopodium* spp. (Toll [1953]: 219, Patzak 1974: 271, Razowski 1990: 161).

The larva, when full-fed, leaves the foodplant for hibernation. Pupation takes place inside the case in June-July. The cases can best be looked for in September-October. The adult is on the wing in July-August.

***Coleophora calycotomella* Stainton, 1869**

A male specimen of *Coleophora calycotomella* was caught at Sougné, near Remouchamps (province of Liège) on 11.VI.2003, leg. R. Spronck (det. H. W. van der Wolf). This is the first record of this species for Belgium. It should be added to the Belgian list after *Coleophora deauratella* Lienig & Zeller, 1846 (De Prins 1998: 66).

C. calycotomella prefers xerotherm habitats and is mainly distributed in the southern part of Europe. Baldizzone (1996: 86) mentions it from: Albania, Crete, France, Germany, Greece, Italy, Malta, the Netherlands, Portugal, Sardinia, Sicily, Spain, and former Yugoslavia.

The species was discovered in the Netherlands as late as 1986 when some specimens were caught at Mook (province of Limburg). In 1990 and 1992 it was found also in the province of Noord-Brabant (Kuchlein 1993: 264). In Germany, *C. calycotomella* has been found in 4 Bundesländer: Hessen, Nordrhein-Westfalen, Rheinland-Pfalz and Saarland (Gaedike & Heinicke 1999: 69). In this region, no less than 15 localities are known (Biesenbaum & van der Wolf 1999: 96–97, 288). Lhomme (1946–1963: 927) mentions only 4 departments in France: Alpes-Maritimes, Ardèche, Hérault and Savoie. The species has not been mentioned from Great Britain and Luxemburg thus far.

The caterpillar lives on *Calycotoma spinosa*, *Cytisus scoparius* and several species of *Adenocarpus*, all belonging to Fabaceae (Lhomme 1946–1963: 928).

***Cydia inquinatana* (Hübner, [1799])**

This tortricid has been mentioned before from the Belgian fauna, without indicating any locality (De Sélys-Longchamps 1844: 22). While preparing the Catalogue of the Belgian Lepidoptera no authentic Belgian specimens could be retrieved in any of the visited collections and therefore this species was not included in the Belgian list (De Prins 1998: 102). However, recently some specimens of *C. inquinatella* were caught in the east of the country by the second author: Forêt de Trooz 16.VI.2003, Visé, 25.V.2003 (both province of Liège) (preliminary identification checked by F. Groenen and K. Larsen). It should be inserted in the Belgian list as last species of the genus *Cydia* (De Prins 1998: 100).

Plate 1



1



2



3



4

Fig. 1.— *Caloptilia semifascia* (Haworth, 1828), Belgium, Prov. of Limburg, Diepenbeek, 04.IX.2002, 2.— *Coleophora adspersella* Benander, 1939, Belgium, Prov. of Liège, Visé, 07.VIII.2000, 3.— *Coleophora calycotomella* Stainton, 1869, Belgium, Prov. of Liège, Sougné near Remouchamps, 11.VI.2003, 4.— *Cydia inquinatana* (Hübner, [1799]), Belgium, Prov. of Liège, Visé, 29.V.2003, all leg. et coll. R. Spronck, all photos enlarged (Photos Jurate De Prins).

C. inquinatana occurs from Europe to Ciscaucasia (Razowski 2001: 92). Razowski (1996: 155) mentions it from the following countries: Austria, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, Norway, Romania, Russia, Sicily, Slovakia, Sweden, and former Yugoslavia. It is absent from Great Britain, the Netherlands and Luxemburg. In France, it has been mentioned as "méridionale", and only four departments are listed: Cher, Indre, Lot and Saône-et-Loire. However, Lhomme (1935–1946: 449) writes that, due to identification difficulties and problems with synonymy, only the record of Lot is reliable. In Germany, the species has been recorded during the last 20 years in Bayern, Mecklemburg-Vorpommern, Brandenburg, Sachsen, and older records are known from Sachsen-Anhalt and Thüringen (Gaedike & Heinicke 1999: 105).

The host plant is *Acer pseudoplatanus* and also *A. campestre*. The caterpillar lives in the seeds during September–October (Razowski 2001: 92).

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